WHAT IS CLAIMED IS:

1. Method for producing hybrid disks with:

a first substrate (1), transparent in a given spectral band,

succeeding it, a layer system (2), semi-transparent in the given band,

succeeding it, a further substrate (5), transparent in the given band,

succeeding it, a reflection layer system (6), in which the semi-transparent layer system (2) as well as the reflection layer system (6) is deposited with a vacuum coating method of identical type,

characterized in that over the first substrate a moisture protection layer system, transparent in the given spectral band, of at least one layer is deposited with a vacuum coating method of, again, identical type.

2. Method for producing hybrid disks with:

a first substrate (1), transparent in a given spectral band,

succeeding it, a layer system (2) semi-transparent in said band,

succeeding it, a further substrate (5), transparent in said band,

succeeding it, a reflection layer system (6), characterized in that over the first transparent substrate is applied by sputtering a moisture protection layer system transparent in said spectral band and comprising at least one layer.

3. Method for producing hybrid disks with:

a first substrate (1), transparent in a given spectral band,

succeeding it, a layer system (2), semi-transparent in said band,

succeeding it, a further substrate (5), transparent in said band,

succeeding it, a reflection layer system (6), characterized in that over the first transparent substrate (1) a protection layer system is deposited comprising at least one layer of substoichiometric silicon oxide and/or of at least one layer of silicon oxinitride.

4. Method as claimed in claim 1, characterized in that sputtering is selected as the type of vacuum coating method.

5. Method as claimed in claim 1, characterized in that as the at least one layer a layer is deposited of substoichiometric silicon oxide and/or silicon oxinitride.

6. Method as claimed in claim 2, characterized in that the protection layer system of substoichiometric silicon oxide and/or of silicon oxinitride is deposited by sputtering.

7. Method as claimed in claim 1, characterized in that sputtering is selected as the type of vacuum coating method and the protection layer system is deposited of substoichiometric silicon oxide and/or of silicon oxinitride.

8. Method as claimed in claim 1, characterized in that the refractive index of the material of the moisture protection layer system is selected to be equal to the refractive index of the material of the first transparent substrate (1).

9. Method as claimed in claim 1, characterized in that with respect to the refractive index n of the moisture protection layer system material the following is selected:

$1.47 \leq n \leq 1.7$,

preferably $1.5 \leq n \leq 1.6$,

in particular preferred $n \leq 1.57$.

10. Method as claimed in claim 1, characterized in that for the extinction constant k of the moisture protection layer system material the following is selected:

$10^{-4} \leq k \leq 5 \times 10^{-3}$

preferably $k \leq 10^{-3}$.

11. Method as claimed in claim 1, characterized in that the moisture protection layer system is deposited by reactive sputtering of a silicon target in an atmosphere containing oxygen and/or oxygen and nitrogen.

12. Method as claimed in claim 1, characterized by deposition of a substoichiometric silicon oxide layer and/or a silicon oxinitride layer as a moisture protection layer system with a system thickness of minimally 10 nm and, preferably, of maximally 50 nm.